

2. Applicants note the necessity of filing corrected formal drawings but wish to delay the compliance with this requirement until after allowable subject matter is indicated in this application. The correction will include the renumbering of Figures 3-11 as Figures 2-10.

3. Claims 1, 8-12 and 26 were rejected under 35 U.S.C. §112, first paragraph.

A) The first ground for this rejection is that applicants allegedly have not disclosed how to use CD3-specific pharmaceutical compositions either alone or in combination with other reagents "as a therapeutic regimen for human diseases essentially for the reasons of record set forth in the last Office Action." The Examiner specifically referred to the importance of posttranslational carbohydrate modifications for high affinity selective binding, noted that CD34 is glycosylated differently in different endothelial cells, and that there is insufficient evidence that L-selecting mediated inflammatory diseases could in fact be successfully treated in humans by the administration of a CD34 glycoprotein having the endothelial glycoform of native CD34.

Without acquiescence in the Examiner's position, claims 8-12 and 26 have been cancelled, and claim 1 and new claim 28 are now directed to the inhibition of L-selectin binding to peripheral lymphoid tissues. Example 1 specifically demonstrates the ability of CD34 isolated from peripheral lymph nodes to bind L-selectin. Based upon these data, a person skilled in the art will readily accept that contacting L-selectin with CD34 having the glycoform of native CD34 isolated from peripheral lymph nodes blocks the binding of L-selectin to peripheral lymphoid tissues. Accordingly, the claims as currently amended are clearly enabled by the specification.

B) Claim 9 was rejected for its recitation of "selectin, selectin ligand, an integrin, an integrin ligand other than CD34 polypeptides, or antibodies to such molecules." The cancellation of claim 9 moots its rejection.

Accordingly, the reconsideration and withdrawal of the rejections under 35 U.S.C. §112, first paragraph is respectfully requested.

4. Claims 1, 8-12, and 26 were rejected under 35 U.S.C. §112, second paragraph, for being “indefinite” in the recitation of “L-selectin-mediated inflammation” and “a therapeutically effective amount.” As claims 8-12 and 26 are cancelled, and the phrases objected to do not appear in amended claim 1 or new claim 28, this rejection is believed to be moot.

5. Claims 1, 8, 12, and 26 were rejected under 35 U.S.C. §102(e) “as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over Butcher et al.” The Examiner specifically refers to column 5, paragraph 2 of the Butcher patent as allegedly teaching the treatment of inflammatory diseases “with soluble forms of the addressin identified by MECA-79.”

Applicants have been unable to find the alleged teaching either at column 5, paragraph 2, or at other parts of the patent. At the top of column 5, Butcher et al. note that their antibodies “identify endothelial cell surface molecules mediating recognition of migrating lymphocytes and other leukocytes”, and “define endothelial cell determinants” in various tissues, including HIV in peripheral lymph nodes. The next paragraph concerns the construction of a wide variety of antibodies. The second full paragraph concerns the production of monoclonal antibodies by hybridoma technology, while the paragraph bridging columns 5 and 6 concerns certain antibody variants. The first full paragraph concerns the endothelial cell surface molecules identified, and proposes that they “mediate the recognition of migrating lymphocytes.” The last paragraph before Table 1 generically refers to the “ability to inhibit immune system function” as being useful in treating various diseases, including those listed in Table 1. The rest of the disclosure concerns the administration of antibodies to treat such diseases or to target therapeutic or diagnostic reagents to specific tissues and organs. In summary, the overall teaching of Butcher is to block the function of certain endothelial cell markers by the administration of monoclonal antibodies in order to treat

clinical problems associated with destructive immune and inflammatory reactions. Should the Examiner disagree with this analysis, she is respectfully requested to more specifically point out the alleged disclosure in Butcher et al.

6. Claims 1, 8, 12 and 26 were rejected under 35 U.S.C. §102(e) as "anticipated by", or under 35 U.S.C. §103 as "obvious" over Lasky et al. The attached Declaration under 37 C.F.R. §1.132, and the cancellation of claims 8, 12 and 26 are believed to obviate this rejection.

7. Claims 1, 8-11 and 26 were rejected as being obvious over Butcher et al. or Lasky et al. in view of a 1992 Lasky et al. CSHSQB paper, Berg et al., or Imai et al., Sutherland et al., the Lasky et al. '833 patent, Watson et al., and Fina et al.

Claims 8-11 and 26 are cancelled, and the rejection of claim 1 is believed to be misplaced. In response to the previous rejections applicants have shown that Butcher et al. and the primary Lasky et al. reference do not make obvious the present invention. Since the primary references do not apply, the rejection based upon their combination with the secondary references should necessarily fall.

8. Claims 9-11 were rejected as allegedly obvious over the combination of Lasky et al. or Butcher et al. with numerous secondary references. The cancellation of claims 9-11 moots their rejection.

In conclusion, applicants note that the present invention does not contemplate the use of "CD34-specific pharmaceutical composition" as suggested in the last paragraph of item 12 of the Office Action. The present invention concerns the use of (L-selectin specific) CD34 itself.

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As the present application is believed to be in *prima facie* condition for allowance, an early issuance of a notice of allowance is respectfully solicited.

Respectfully submitted,  
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